

Fig 1

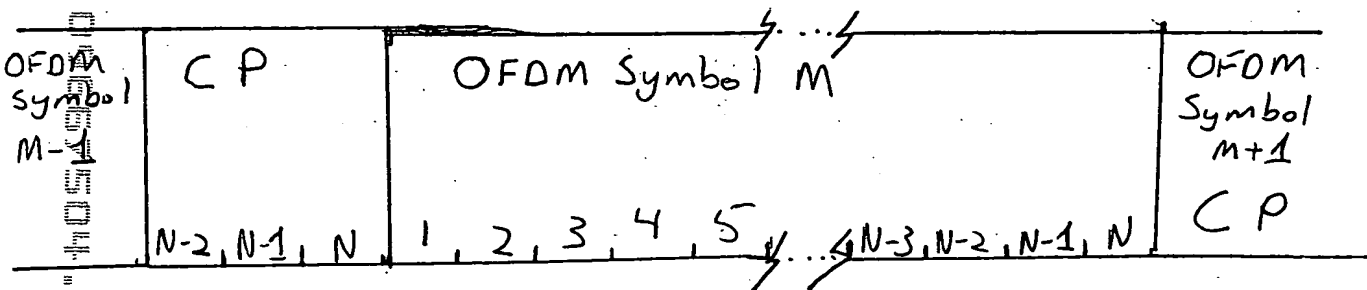


Fig 2

**Transmitter**

Ant 1 TX  
Ant 2 TX  
...  
Ant M TX

$S(k)$  → IFFT, + CP →  $s(n)$

OFDM signal

Ant 1:  $\sqrt{M}$   
Ant 2:  $\sqrt{M}$  + Linear delay =  $T/N$   
...  
Ant M:  $\sqrt{M}$  + Linear delay =  $P \cdot T/N$

**Medium**

$H_1$   
 $H_2$   
...  
 $H_M$

**Receiver**

Ant 1 RX  
Ant 2 RX  
...  
Ant M RX

$s(n) \cdot (h_1(n) + h_2(n) + \dots + h_M(n))$

CP, FFT →  $S(k)(H_1(k) + H_2(k) + \dots + H_M(k))$

**Time Domain Diagram**

Time

Antenna 1: OFDM Symbol n-1, OFDM Symbol n, OFDM Symbol n+1

Antenna 2: OFDM Symbol n-1, OFDM Symbol n, OFDM Symbol n+1

Antenna M: OFDM Symbol n-1, OFDM Symbol n, OFDM Symbol n+1

FFT window, Symbol n-1    FFT window, Symbol n    FFT window, Symbol n+1

Fig 3

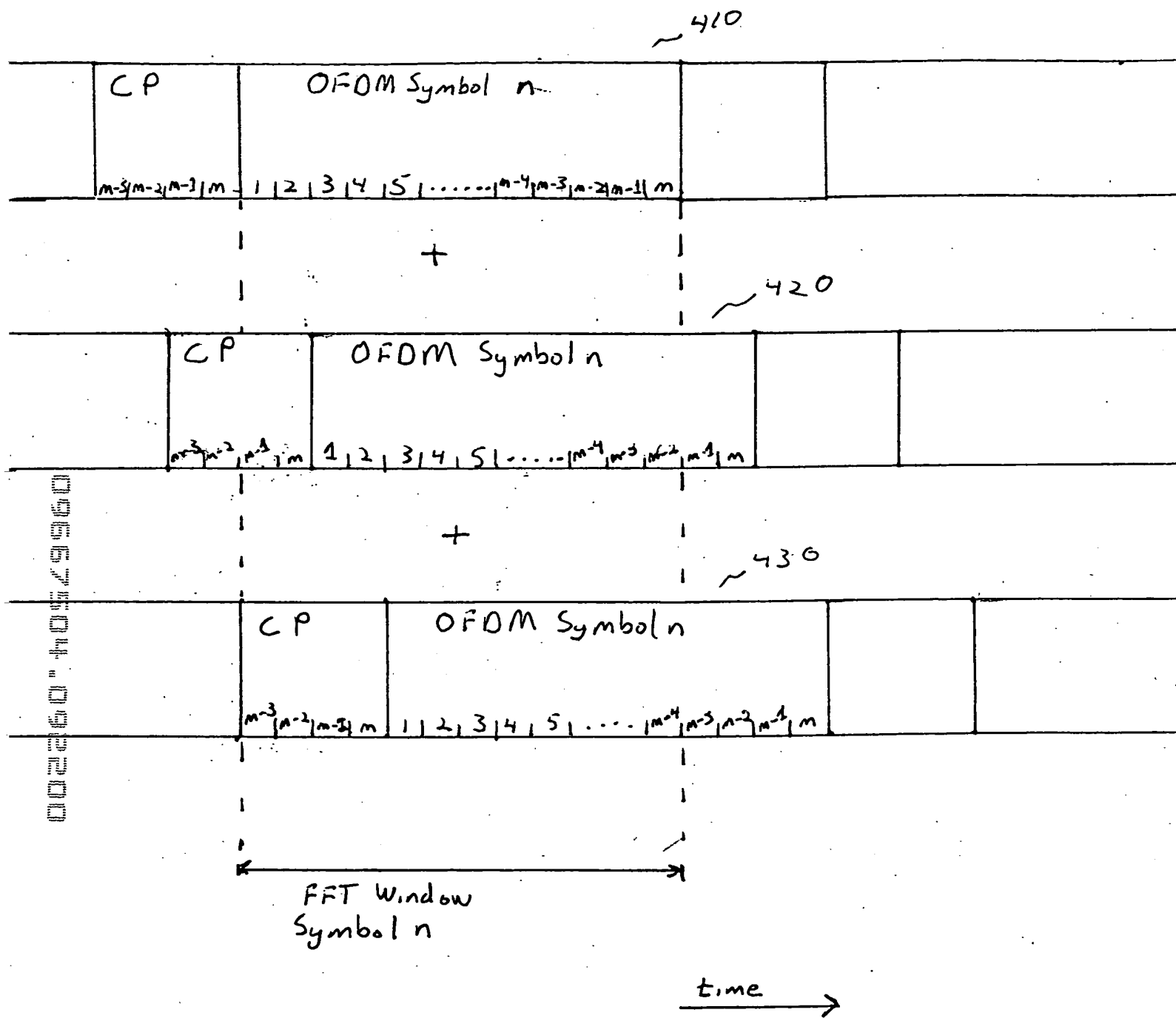


Fig 4

002260-140579960

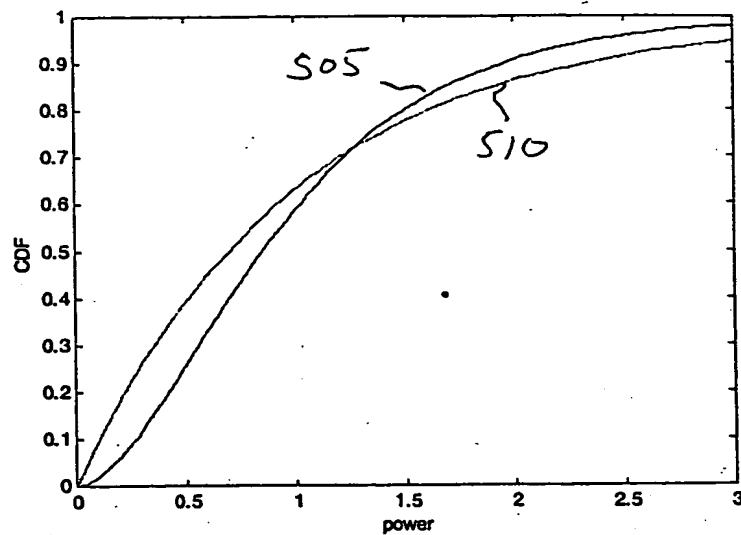


Fig 5

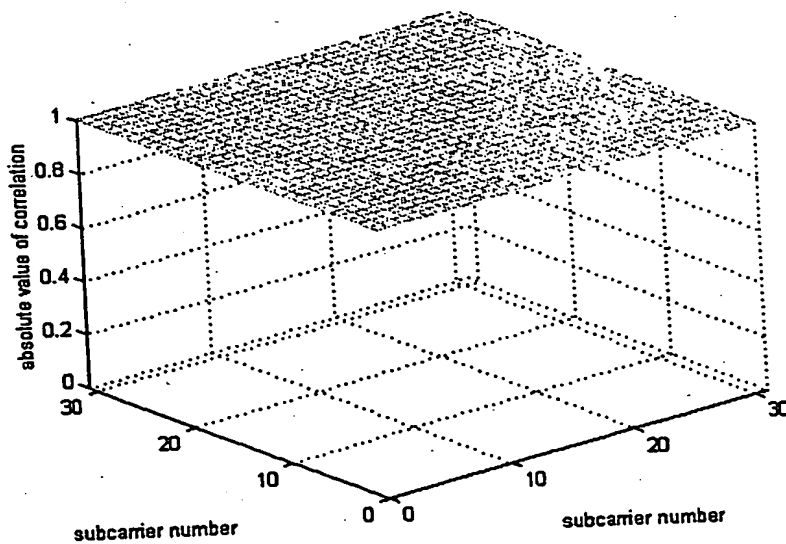


Fig 6

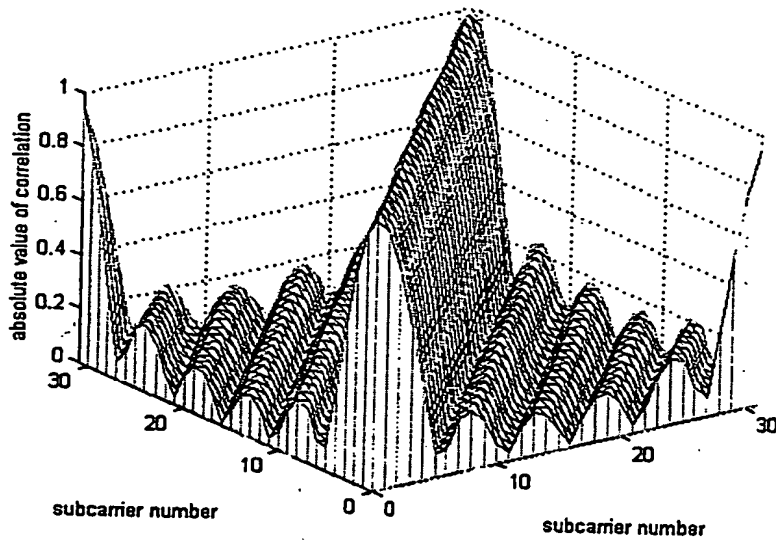


Fig 7

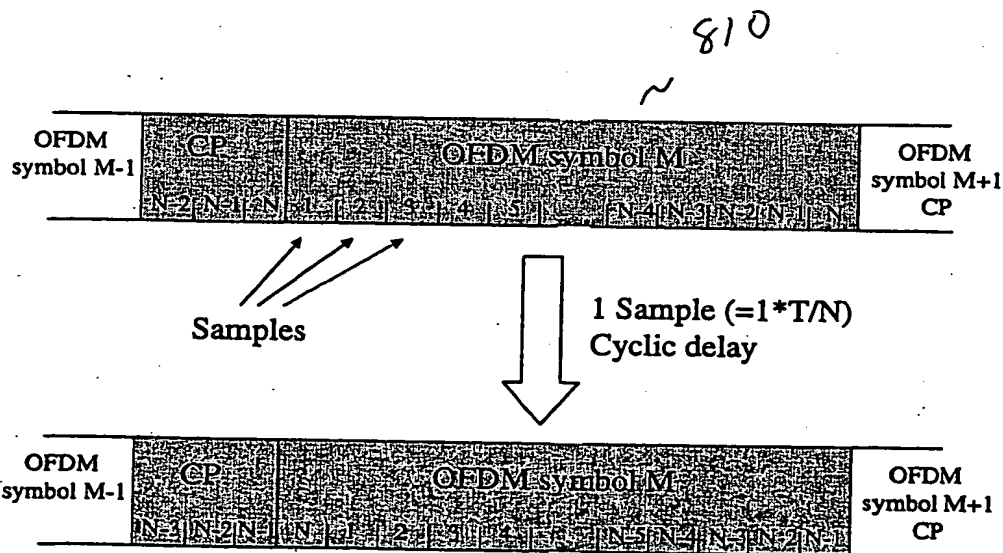


Fig 8

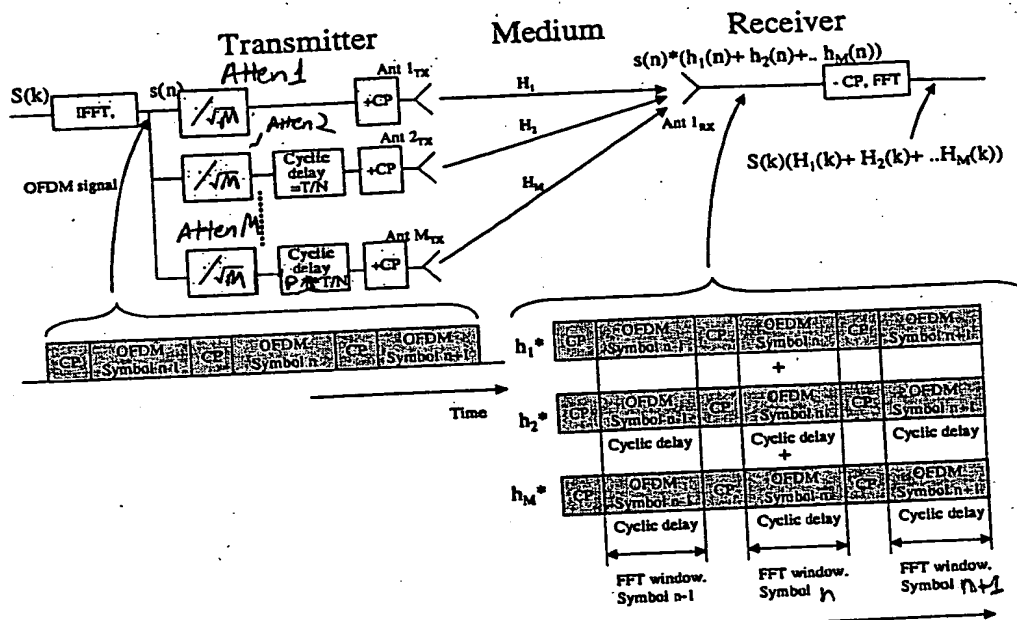


Fig 9

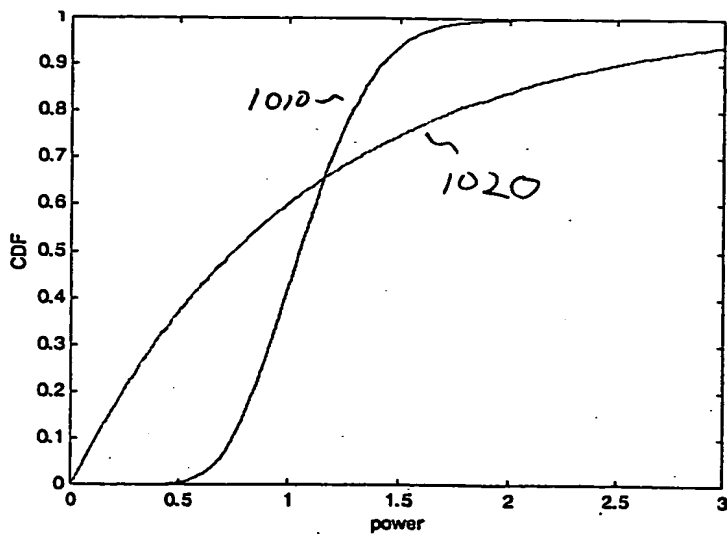


Fig 10

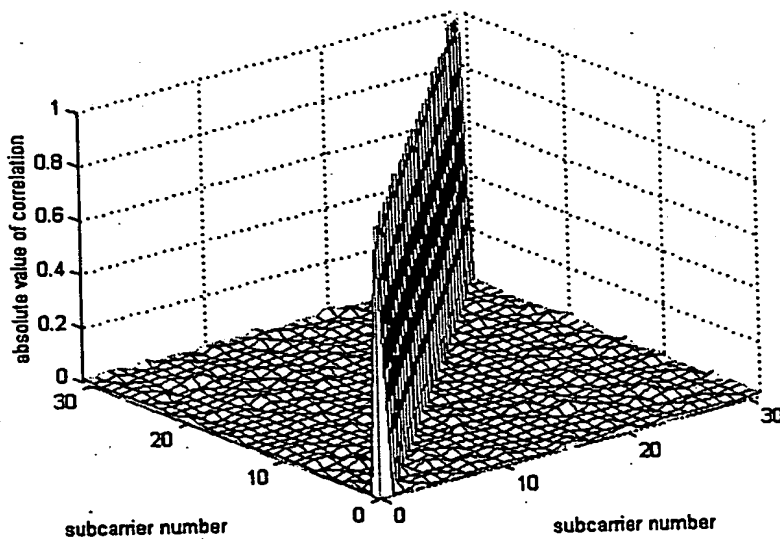


Fig 11

002260 4052960

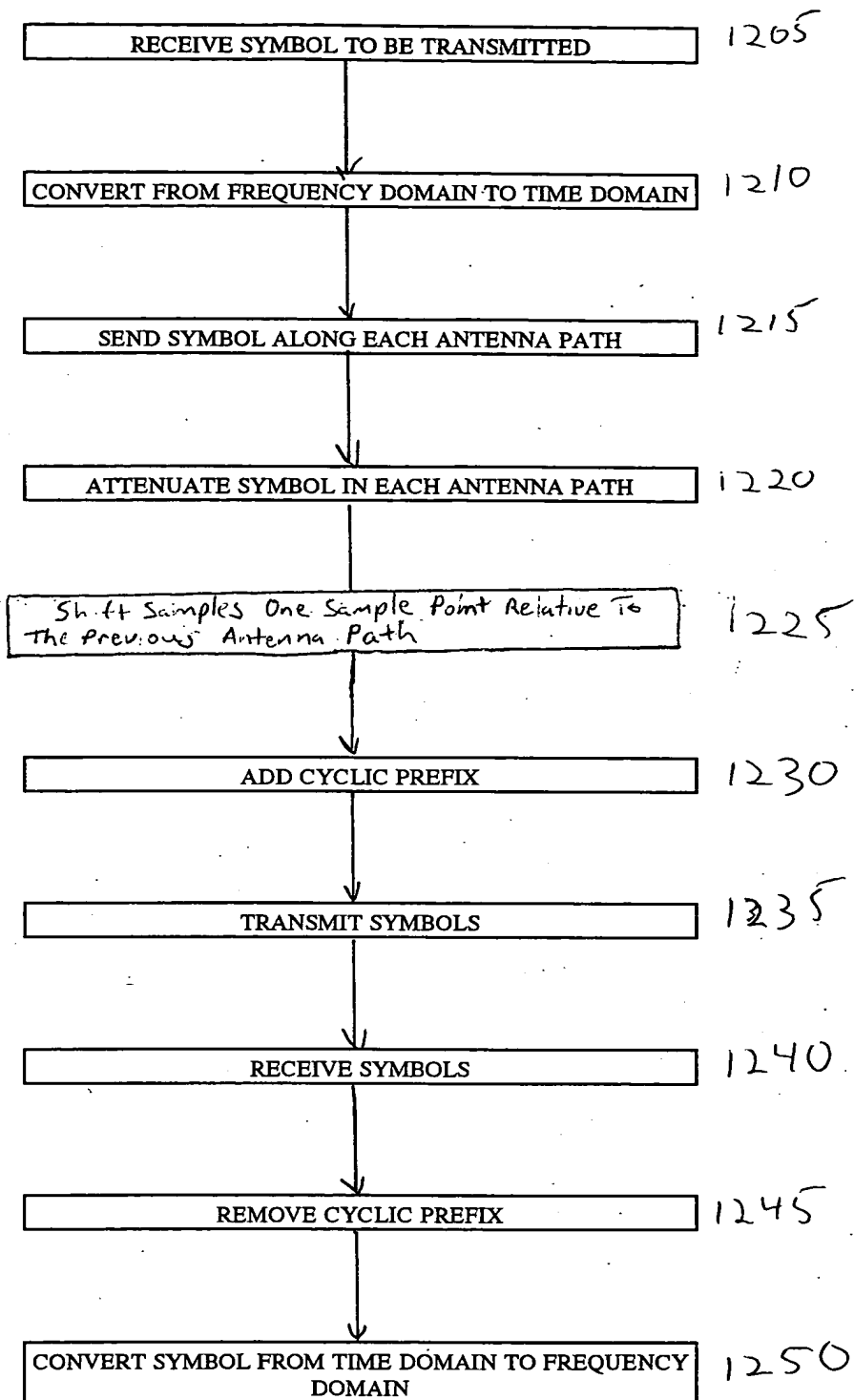


FIG 12

002260"40529960

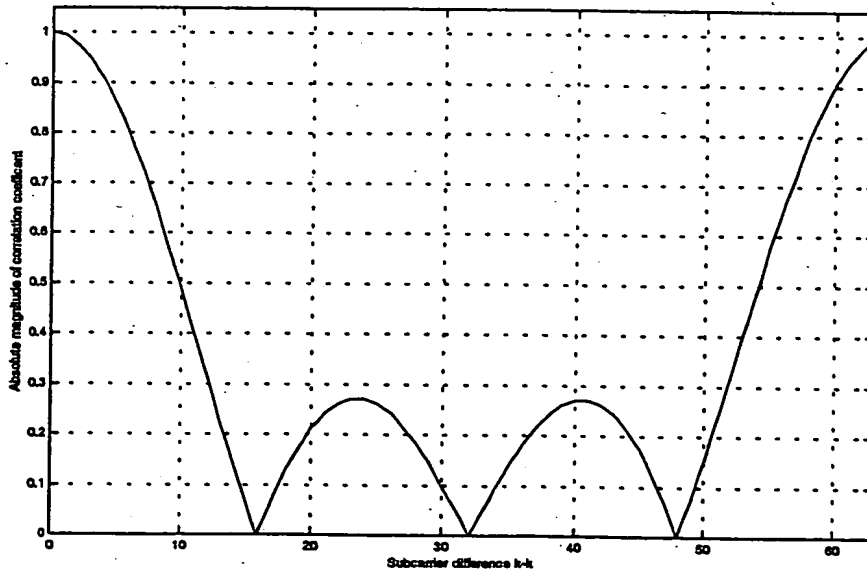
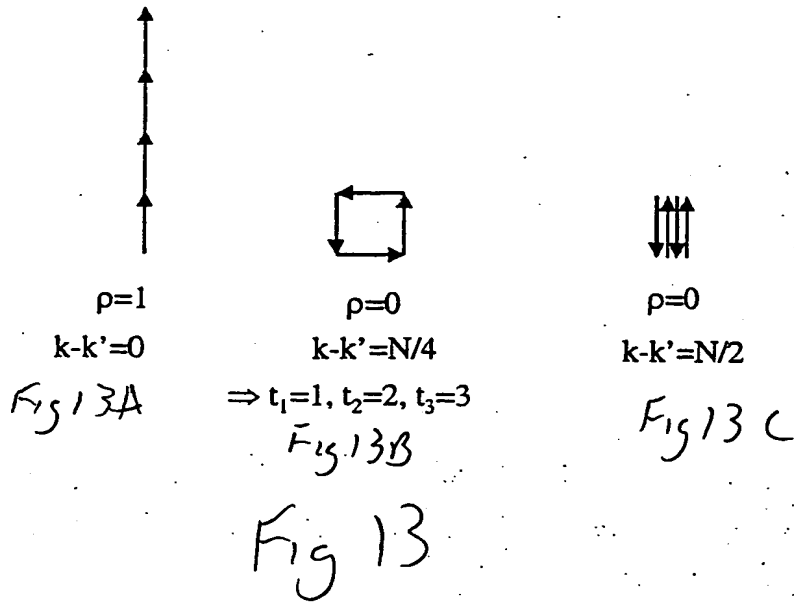


Fig 14

002260 10504 092200

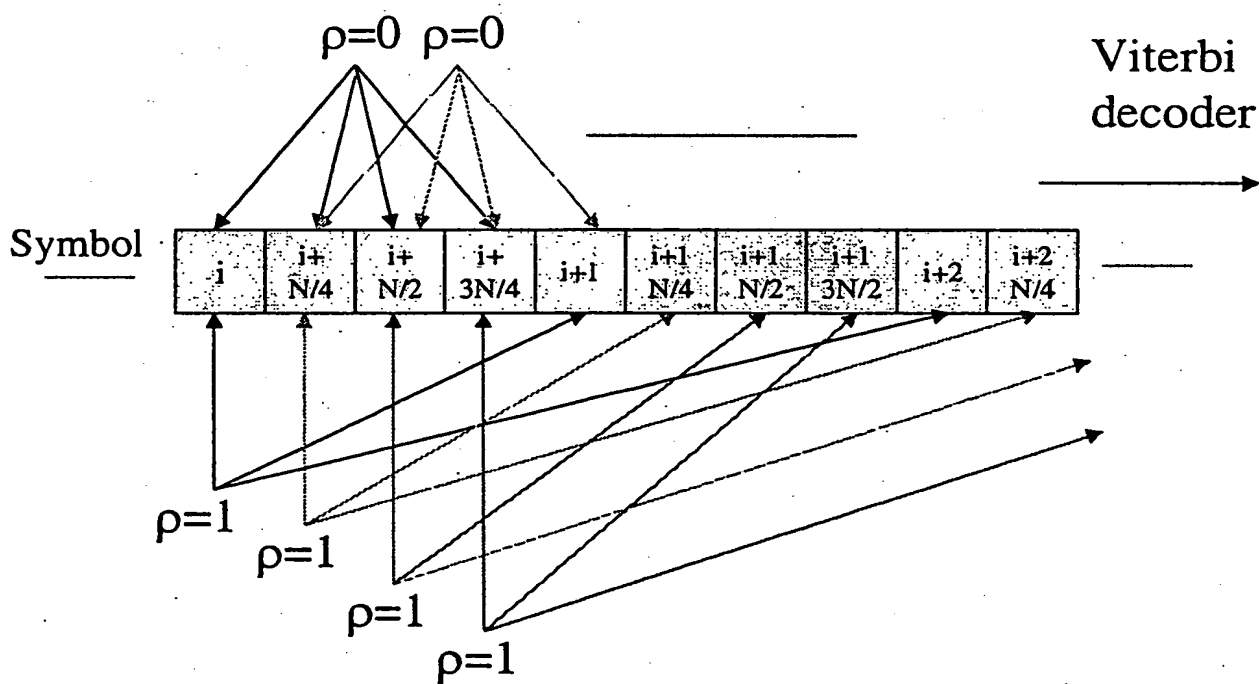


Fig 15